

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333373-930

Luminaire Tested: **S125DIW-S610D470U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333373-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S610D470U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3283.1 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

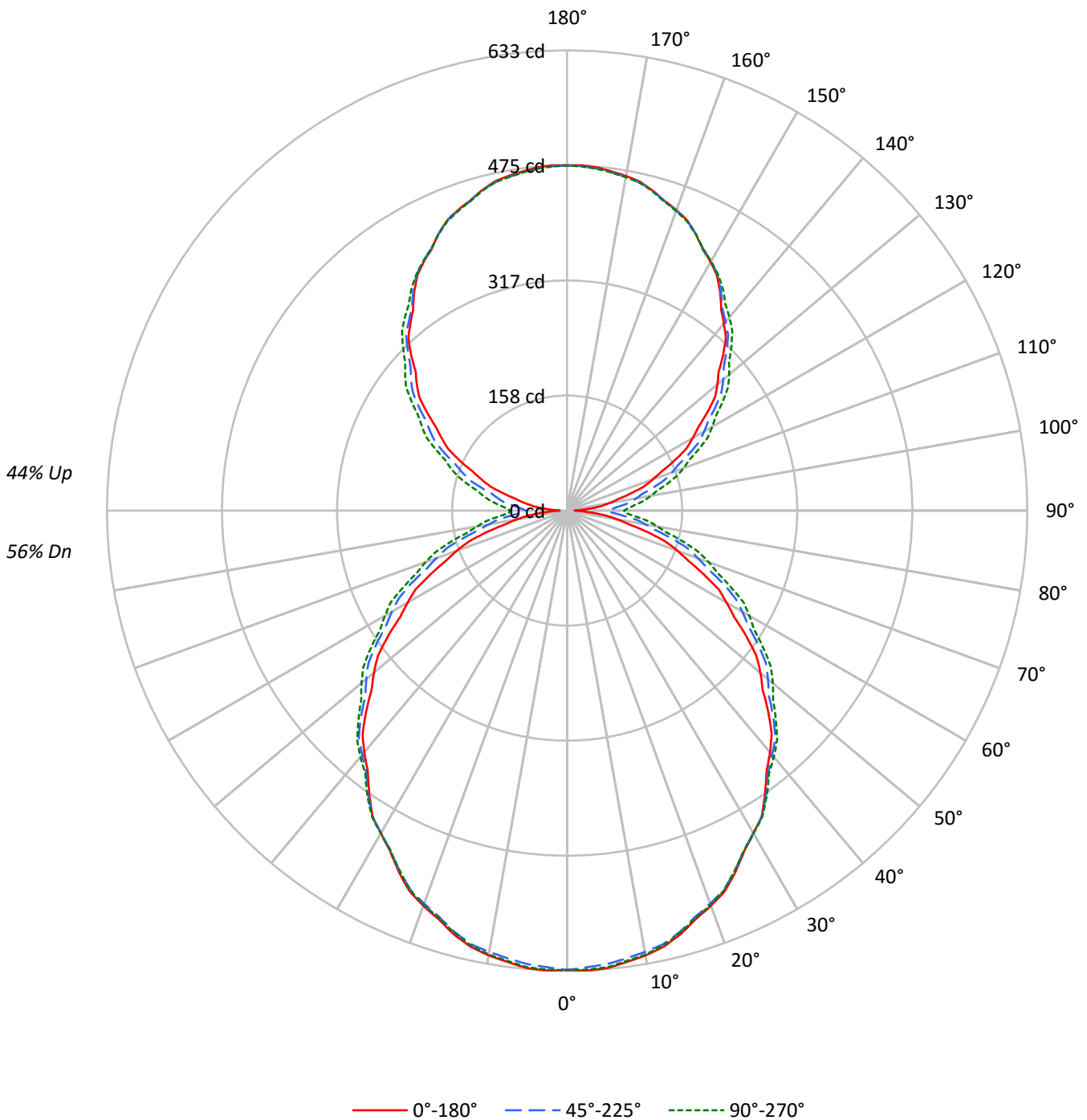
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			20
RC	80				70				50			30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10		0
RCR																			
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62		56
1	98	94	89	85	91	87	83	80	75	72	69	64	62	60	53	52	50		45
2	89	81	75	69	82	76	70	65	65	61	57	55	52	49	46	44	42		37
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	35		31
4	74	63	55	48	68	59	51	46	51	45	40	43	39	35	36	33	30		27
5	68	56	47	41	63	52	45	39	45	39	35	39	34	30	33	29	26		23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	26	30	26	23		20
7	58	45	37	31	54	42	35	30	37	31	26	32	27	23	27	23	20		18
8	54	41	33	28	50	38	31	26	34	28	23	29	24	21	25	21	18		16
9	50	37	30	25	46	35	28	23	31	25	21	27	22	19	23	19	16		14
10	47	34	27	22	43	32	26	21	28	23	19	25	20	17	21	17	15		13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.8
10°-20°	169.6	5.2
20°-30°	252.2	7.7
30°-40°	298.8	9.1
40°-50°	308.9	9.4
50°-60°	284.6	8.7
60°-70°	230.0	7.0
70°-80°	154.0	4.7
80°-90°	80.9	2.5
90°-100°	76.6	2.3
100°-110°	127.0	3.9
110°-120°	181.2	5.5
120°-130°	221.9	6.8
130°-140°	240.1	7.3
140°-150°	231.0	7.0
150°-160°	193.1	5.9
160°-170°	128.4	3.9
170°-180°	44.9	1.4
0°-30°	481.6	14.7
0°-40°	780.4	23.8
0°-60°	1373.8	41.8
0°-90°	1838.8	56.0
90°-120°	384.8	11.7
90°-150°	1077.8	32.8
90°-180°	1444.0	44.0
0°-180°	3283.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	10	33	57	72	78	8
95°	32	49	74	89	95	32
105°	90	102	122	136	142	96
115°	163	169	186	196	200	161
125°	235	237	249	258	261	210
135°	304	305	310	318	320	234
145°	367	368	369	372	373	229
155°	419	419	419	421	419	193
165°	456	455	455	457	454	128
175°	474	472	472	474	472	45
180°	475	475	475	475	475	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.4	24.0	28.5	33.0	37.6	42.2	47.0	51.8	56.6	61.4	64.7
90°	10.3	15.3	20.4	25.4	30.5	35.7	40.9	46.2	51.4	56.7	60.3
92.5°	17.9	22.4	26.9	31.5	36.0	41.0	46.6	52.0	57.5	63.0	66.6
95°	32.0	35.8	39.5	43.3	47.0	51.7	57.2	62.7	68.2	73.7	77.3
97.5°	47.2	50.5	53.8	57.1	60.3	64.8	70.4	76.1	81.8	87.4	90.8
100°	58.5	61.5	64.3	67.2	70.1	74.3	79.7	85.2	90.7	96.2	99.8
102.5°	70.8	73.8	76.8	79.7	82.8	86.7	91.5	96.4	101.2	106.0	109.6
105°	89.8	92.5	95.1	97.7	100.3	103.9	108.5	113.2	117.7	122.4	125.6
107.5°	111.0	113.2	115.5	117.8	120.1	123.4	127.8	132.1	136.4	140.8	143.7
110°	125.6	127.6	129.6	131.8	133.8	136.9	141.0	145.0	149.2	153.3	156.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	140.9	142.4	144.0	145.5	147.1	149.9	153.9	157.9	162.0	166.1	168.7
115°	163.0	164.3	165.6	166.9	168.1	170.6	174.4	178.1	181.9	185.6	188.0
117.5°	185.2	185.9	186.7	187.4	188.3	190.4	194.0	197.5	201.0	204.6	206.9
120°	199.3	200.2	201.0	201.8	202.6	204.6	207.9	211.2	214.4	217.6	220.0
122.5°	214.2	214.5	214.9	215.2	215.6	217.4	220.6	223.9	227.1	230.4	232.6
125°	234.9	235.3	235.6	235.9	236.4	237.9	240.8	243.6	246.5	249.2	251.3
127.5°	256.5	256.6	256.7	256.9	257.1	258.3	260.7	263.0	265.4	267.7	269.6
130°	269.8	270.0	270.3	270.6	270.8	272.1	274.1	276.2	278.3	280.4	282.3
132.5°	282.6	283.2	283.9	284.5	285.2	286.2	287.6	289.1	290.6	292.0	293.8
135°	303.5	303.9	304.2	304.6	304.9	305.7	306.7	307.7	308.8	309.8	311.6
137.5°	323.2	323.6	323.9	324.3	324.7	325.1	325.8	326.4	327.1	327.8	329.5
140°	335.4	335.8	336.2	336.6	337.0	337.5	337.9	338.2	338.6	339.0	340.6
142.5°	348.1	348.4	348.6	348.8	349.0	349.4	349.7	350.0	350.3	350.7	352.1
145°	366.8	367.0	367.2	367.4	367.6	367.8	368.0	368.3	368.5	368.8	369.5
147.5°	383.5	383.7	383.8	384.0	384.3	384.4	384.6	384.8	385.0	385.2	385.6
150°	395.0	394.9	394.8	394.8	394.7	394.8	395.2	395.5	395.8	396.2	396.2
152.5°	404.5	404.6	404.7	404.8	405.0	405.0	405.2	405.4	405.4	405.6	405.8
155°	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.2	419.3	419.4	419.7
157.5°	432.0	431.9	431.7	431.5	431.3	431.3	431.4	431.5	431.5	431.6	431.9
160°	439.8	439.5	439.2	439.0	438.7	438.6	438.7	438.8	438.9	439.0	439.4
162.5°	446.5	446.4	446.2	446.0	445.8	445.7	445.7	445.7	445.8	445.8	446.2
165°	455.6	455.4	455.3	455.1	454.9	454.9	455.0	455.1	455.2	455.3	455.6
167.5°	463.3	463.0	462.7	462.4	462.0	461.9	461.9	461.9	461.9	461.9	462.4
170°	467.4	467.1	466.8	466.4	466.1	465.9	465.9	465.9	465.9	465.9	466.4
172.5°	470.4	470.1	469.8	469.4	469.1	469.0	469.0	469.0	469.0	469.0	469.4
175°	473.8	473.4	473.0	472.7	472.4	472.2	472.2	472.2	472.2	472.2	472.7
177.5°	475.4	475.2	474.9	474.7	474.3	474.2	474.2	474.1	474.0	473.9	474.3
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	67.9	71.2	74.4	76.6	77.5	78.5	79.6	80.6
90°	63.8	67.4	71.0	73.4	74.6	75.8	77.0	78.3
92.5°	70.2	73.8	77.4	79.7	80.9	82.0	83.2	84.3
95°	80.9	84.5	88.1	90.4	91.6	92.7	93.8	95.0
97.5°	94.3	97.8	101.2	103.4	104.4	105.5	106.5	107.5
100°	103.5	107.0	110.7	113.0	114.0	115.0	116.0	117.0
102.5°	113.2	116.8	120.3	122.7	123.8	124.8	125.9	126.9
105°	128.9	132.2	135.3	137.6	138.8	140.0	141.2	142.4
107.5°	146.8	149.7	152.6	154.6	155.4	156.2	157.1	157.9
110°	159.0	161.8	164.7	166.6	167.5	168.4	169.3	170.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	171.3	173.9	176.6	178.3	179.1	179.9	180.8	181.6
115°	190.5	192.8	195.3	196.8	197.5	198.3	199.0	199.7
117.5°	209.4	211.7	214.2	215.6	216.3	216.9	217.5	218.1
120°	222.3	224.7	227.0	228.4	228.9	229.4	229.9	230.4
122.5°	234.8	236.9	239.1	240.4	241.0	241.6	242.1	242.7
125°	253.3	255.4	257.4	258.8	259.3	259.9	260.6	261.1
127.5°	271.6	273.5	275.5	276.8	277.4	278.1	278.8	279.3
130°	284.1	285.9	287.8	288.9	289.5	290.0	290.6	291.1
132.5°	295.7	297.6	299.4	300.5	300.8	301.2	301.6	301.9
135°	313.4	315.2	317.0	318.0	318.4	318.8	319.1	319.5
137.5°	331.2	333.0	334.7	335.6	335.7	335.9	336.0	336.1
140°	342.3	344.1	345.7	346.6	346.7	346.9	347.0	347.2
142.5°	353.5	354.9	356.3	357.0	357.2	357.3	357.4	357.6
145°	370.1	370.9	371.5	372.0	372.3	372.7	372.9	373.2
147.5°	386.0	386.5	386.9	386.9	386.6	386.3	386.0	385.6
150°	396.2	396.2	396.2	396.2	396.1	396.1	396.1	396.0
152.5°	406.0	406.2	406.3	406.3	406.1	405.8	405.5	405.3
155°	420.0	420.4	420.7	420.7	420.3	419.9	419.5	419.1
157.5°	432.3	432.6	432.9	432.8	432.3	431.7	431.2	430.6
160°	439.7	440.0	440.3	440.3	439.9	439.4	439.0	438.6
162.5°	446.6	446.9	447.4	447.4	446.9	446.4	445.9	445.4
165°	455.9	456.2	456.6	456.5	456.0	455.5	455.0	454.5
167.5°	462.8	463.3	463.8	463.8	463.3	462.8	462.3	461.8
170°	466.9	467.4	468.0	467.9	467.3	466.8	466.2	465.6
172.5°	469.9	470.4	470.9	470.9	470.3	469.9	469.4	468.9
175°	473.2	473.8	474.3	474.2	473.6	473.0	472.5	471.9
177.5°	474.7	475.2	475.6	475.5	475.1	474.6	474.1	473.7
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8

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